

**TWO NEW SPECIES OF *BRICKELLIA* (ASTERACEAE:
EUPATORIEAE) FROM OAXACA, MEXICO**

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ABSTRACT

Two novelties in the genus *Brickellia* from Oaxaca, Mexico, are described: ***Brickellia coixtlahuaca*, sp. nov.** and ***Brickellia huahuapana*, sp. nov.** Both taxa belong to the Barroetia group of *Brickellia*, as envisioned by Turner et al. (1991, 1997). Photographs of the types are provided, along with maps showing their distribution. *Phytologia* 92(1): 15- 19 (April, 2010).

KEY WORDS: *Brickellia*, *Barroetia*, Asteraceae, Eupatorieae, Mexico, Oaxaca.

BRICKELLIA COIXTLAHUACA B.L. Turner, sp. nov. Fig. 1, 2

Brickelliae pavonii (A. Gray) B.L. Turner similis sed differt foliis valde petiolatis (vs sessilibus), pedunculis ultimis brevioribus (2-6 mm longis vs 10-30 mm), et acheniis adaxaliter 2-nervatis (vs 3-4-nervatis).

Delicate, stiffly erect, annuals 15-30 cm high. **Mid-stems** sparsely puberulent. Leaves mostly 2.5-4.0 cm long, 2.0-2.5 cm wide; petioles 3-15 mm long; blades broadly ovate to subcordate, palmately 3-nervate from the base, glabrous or nearly so, the margins serrulate. **Capitulescence** a terminal, somewhat one-sided, corymb, the ultimate peduncles 2-6 mm long. **Heads** ca 8 mm high, each with ca 10 florets; involucre bracts linear-lanceolate, 3-4 seriate, glabrous. **Corollas** 4-5 mm long, 5-lobed, glabrous. **Achenes** flattened, ca 4 mm long, the adaxial side with 2 ribs; pappus of ca 20 slender bristles ca 5 mm long.

TYPE: MEXICO. OAXACA: DISTRITO COIXTLHUACA. Concepcion Buena Vista, "Km 101.5 de la Tehuacan-Oaxaca (cuota)...Chaparral-selva baja caducifolia. Ocasional." 1400 m, 18 04 30 N, 97 21 09.1 W, 30 Sep 1995, *Jose L. Panero 6145* [with I. Calzada & C.C. Clevinger] (Holotype: TEX).

As noted in the above diagnosis, very similar to *B. pavonii*, and so identified by its collectors.

The species is named for the Distrito Coixtlahuaca, whence the type (Fig. 3).

BRICKELLIA HUAHUAPANA B.L. Turner, sp. nov. Fig. 1, 3

Brickelliae laxiflorae (Brandege) B.L. Turner similis sed differt foliis sessilibus (vs valde petiolatis) et acheniorum paginis adaxialibus valde 4-5-nervatis (vs 1-3 nervatis).

Stiffly erect annual (?) herbs 40-80 cm high. **Mid-stems** sparingly pubescent with upturned white hairs. **Leaves** 2.5-3.5 cm long, 1.5-2.5 cm wide; sessile or nearly so; blades ovate, sparingly pubescent above and below, the margins irregularly serrate. **Capitulescence** a terminal corymbose panicle 20-30 cm high, 15-20 cm across, the ultimate peduncles mostly 2-3 cm long. **Heads** 10-11 mm high, 10-20 mm wide. **Involucres** 2-3 seriate, the outermost bracts glabrous, loose and filiform, as long as the inner bracts. **Florets** ca 20 per head; corollas greenish-white, glabrous, 5-7 mm long, the 5 lobes ca 0.5 mm long. **Achenes** flattened with 9 well-developed ribs, black, sparingly pubescent; pappus of ca 20 slender, white, bristles 5-6 mm long.

TYPE: MEXICO. OAXACA: DISTRITO HUAHUAPAN. Mpio. Santo Domingo Tonala, "paraje yucununi parte baja, Selva seca. orillo de arroyo." ca 1405 m, 17 38 31.5 N, 97 58 54.1 W, 13 Nov 2008, *Luis Angel Hernandez Perez 705* (Holotype: TEX).

ADDITIONAL SPECIMEN EXAMINED: Essentially same locality as above: "Guamil. Sobre cerro." ca 1381 m, 8 Nov 2008, *Hernandez 447* (TEX).

Brickellia huahuapana is a very distinctive member of the Barroetea grouping, what with its robust habit and sessile leaves; in habit it much-resembles *Brickellia subuligera*, but its markedly ribbed achenes rule out such an association.

The species name derives from Distrito Huahuapan, whence the type (Fig. 1).

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LITERATURE CITED

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- Turner, B.L., K.J. Kim & J. Norris. 1993. Taxonomic status of *Barroetea glutinosa* (Asteraceae, Eupatorieae) and its allies: morphological evidence for the transfer *Barroetea* to *Brickellia*. Phytologia 71: 38-50.

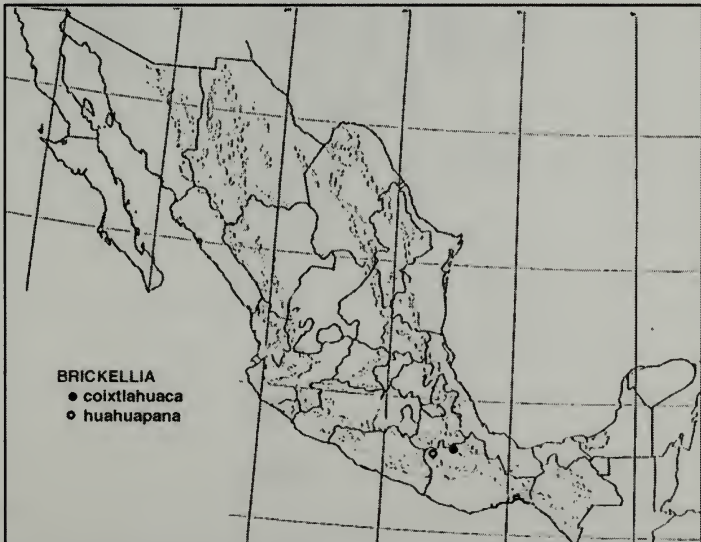


Fig. 1. Distribution of *Brickellia coixtlahuaca* and *B. huahuapana*.

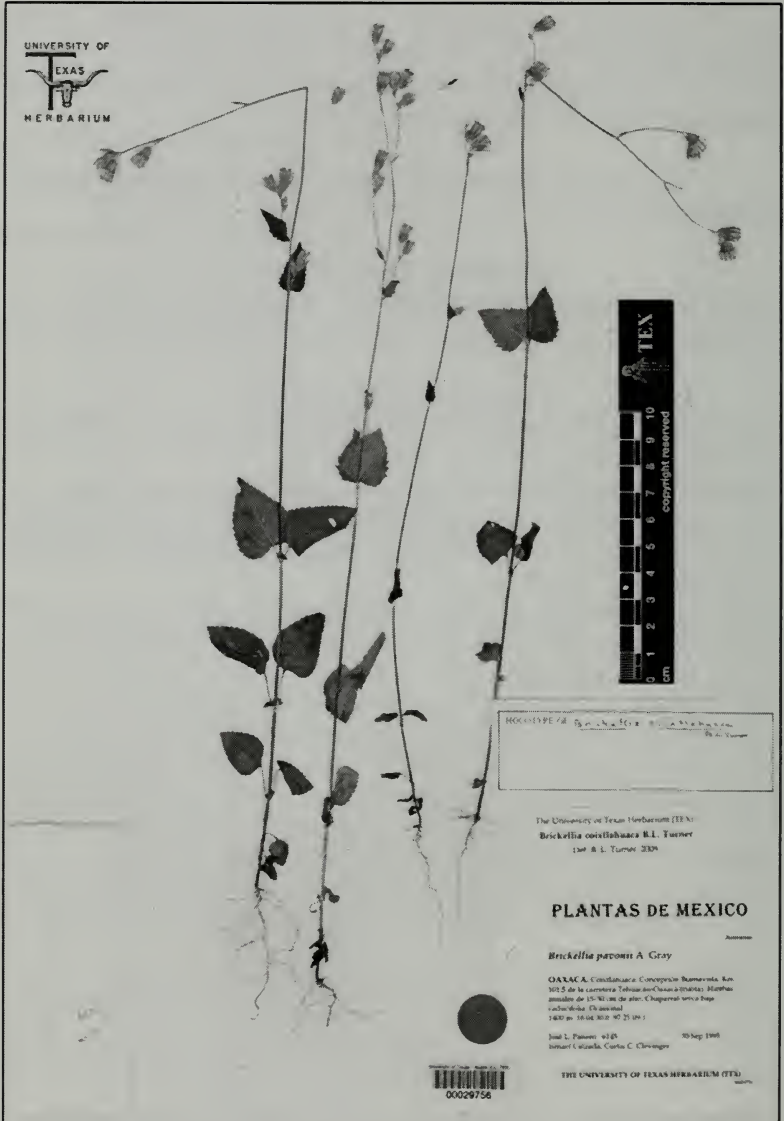


Fig. 2. *Brickellia coixtlahuaca* (Holotype).



Fig. 3. *Brickellia huahuapana* (Holotype).